

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): Device for comminuting empty containers, particularly beverage bottles or beverage cans made of plastic, particularly PET bottles or tin plate, comprising a housing / frame (1), having a fill-in opening (2), as well as an exit opening (3), and

a cutting unit (4) disposed in the housing (1), as well as means for drive and control of the cutting unit (4), whereby

the cutting unit (4) contains at least cutting rollers (4.1 and 4.2), disposed at a distance from one another with regard to their axes of rotation,

~~characterized in that~~ wherein

the cutting mechanism that contains the cutting rollers (4.1 and 4.2) is a document shredder cutting mechanism.

Claim 2 (Currently Amended): Device according to claim 1, ~~characterized in that~~ wherein the cutting mechanism is a particle cut cutting mechanism.

Claim 3 (Currently Amended): Device according to claim 1 or 2, ~~characterized in that~~ wherein a separator / selector (10) is disposed ahead of the cutting mechanism.

Claim 4 (Currently Amended): Device according to claim 3, ~~characterized in that~~ wherein the separator / selector (10) is a vane shaft that preferably possesses three or four vanes (12), the free vane ends of which trail, seen in the direction of rotation (R').

Claim 5 (Currently Amended): Device according to claim 4, ~~characterized in that~~ wherein the vanes attached in the center, i.e. on the axle of rotation, are configured in polygon manner (17) or in arc shape (18) towards their free ends.

Claim 6 (Currently Amended): Device according to claim 3, ~~characterized in that~~ wherein the separator / selector (10) consists of two star-shaped shafts, seen in a side (face) view.

Claim 7 (Currently Amended): Device according to claim 3, 4, 5, or 6, ~~characterized in that~~ wherein stabbing elements (21) that point in the direction of rotation (R') are disposed on the

surface segments of the separator (10) that contact the fed-in containers part of the time.

Claim 8 (Currently Amended) : Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the so-called cutting play (16) between adjacent cutting disks (5) of the cutting mechanism has a value between 0.005 mm and 2 mm.

Claim 9 (Currently Amended) : Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the overlap of adjacent and opposite cutting disks (5) has a value between 0.5 mm and 15 mm.

Claim 10 (Currently Amended) : Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the cutting rollers preferably consist of the material 42CrMoS4 .

Claim 11 (Currently Amended) : Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the cutting disks (5) of the cutting rollers (4.1 and

4.2) are hardened.

Claim 12 (Currently Amended): Device according to ~~at least~~
~~one of the preceding claims~~ claim 1, characterized in that
wherein the bearings of the cutting rollers (4.1 and 4.2) are set
into their bearing plates (8) from the outside.

Claim 13 (Currently Amended): Device according to ~~at least~~
~~one of the preceding claims~~ claim 1, characterized in that
wherein the diameter (D) of the cutting disks (5) lies in the
range of 50 to 200 mm, preferably amounts to 80 mm +/- 10%.

Claim 14 (Currently Amended): Device according to ~~at least~~
~~one of the preceding claims~~ claim 1, characterized in that
wherein the drive (7) of the cutting rollers (4.1 and 4.2) is
preferably designed for speeds of rotation in the range of 30 to
150 rpm.

Claim 15 (Currently Amended): Device according to ~~at least~~
~~one of the preceding claims~~ claim 1, characterized in that
wherein strippers (4.6) are disposed between the cutting disks
(5), whereby standard strippers of document shredders are used.

Claim 16 (Currently Amended): Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein a photo eye is disposed in the region of the fill-in opening (2), to generate a starting pulse for the cutting rollers (4.1 and 4.2).

Claim 17 (Currently Amended): Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein nozzles are disposed in the housing (1), to apply disinfectant to the cutting rollers (4.1 and 4.2) and/or the fill-in opening (2) and the outlet opening (3).

Claim 18 (Currently Amended): Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the cutting disks (5) have grooves (6) worked into their circumference surface (5.1), whose trailing flank (6.3), in the direction of rotation (R, R'), forms a cutting tooth (5.3), together with the circumference surface (5.1), which tooth has an acute angle and points in the direction of rotation, whereby the groove flank (6.3), which begins at the tip, has a linear progression as well as a progression directed counter to the

direction of rotation (R, R'), and the subsequent transition region (6.4) to the groove base (6.2) and/or the groove flank (6.1) that lies in the direction of rotation is configured in arc shape.

Claim 19 (Currently Amended): Device according to claim 18, ~~characterized in that~~ wherein the two groove flanks (6.1 and 6.3) run parallel to one another or diverge from one another.

Claim 20 (Currently Amended): Device according to claim 18 ~~or 19, characterized in that~~ wherein the tip angle (W) of a cutting tooth (5.3) preferably lies between 45° and 80°.

Claim 21 (Currently Amended): Device according to claim 18, ~~19 or 20, characterized in that~~ wherein the arc defined by a groove (6) and a segment of the circumference surface (5.1) of a cutting disk (5) that follows same (6) is preferably determined, by 40%, by the groove (6).

Claim 22 (Currently Amended): Device according to ~~at least one of the preceding claims~~ claim 1, characterized in that wherein the device can be coupled to automated bottle and/or can return machines or integrated into same.